

## TENNESSEE ALTERNATIVE PERFORMANCE BASED ASSESSMENT (APBA)

STUDENT*	DOB
COURSE	
TEACHER	
End of Course score	Date End of Course Administered
Percent/Adjusted Score Based On Alto	ernative Performance Based Assessment
I certify that the above named student essential knowledge and skills for the	$\Box$ has $\Box$ has not demonstrated through state allowable evidence the above named course.
Teacher signature	Date

\*Note - Only students with disabilities on an active IEP are eligible for participation in the APBA

Chemistry Rubric

Standard	Chemistry Essential Knowledge and Skills	Method of Assessment *See Key	0 = No Evidence 1 = limited Evidence 2 = Proficient or Above Rating from 0 to 2
	Apply the periodic table to determine the atomic structure and periodic and bonding trends among groups and periods of elements.		0 1 2
1.0 Atomic Structure	2. Evaluate historical developments that led to the formulation of the modern atomic model.		0 1 2
	3. Apply the engineering design cycle to real-world scenarios involving elemental properties and their uses.		0 1 2
	4. Describe the electron arrangement of an atom in terms of electron configuration notation, orbital notation, and dot notation.		0 1 2
	5. Describe isotopes and their application to society.		0 1 2
	6. Select appropriate equipment to gather, record, and interpret data in a laboratory situation involving classification of matter and interactions between matter and energy.		0 1 2
	7. Employ qualitative and quantitative techniques to determine how changes in volume, temperature, and pressure affect the behavior of gases.		0 1 2
2.0 Matter and Energy	8. Describe the difference among solids, liquids, and gases in terms of energy, particle diagrams, phase diagrams, and heating curves.		0 1 2
	9. Use scenarios to distinguish among the physical, chemical, or nuclear properties and changes in matter.		0 1 2
	10. Differentiate among saturated, unsaturated, supersaturated solutions based on their properties and method of preparation.		0 1 2
	11. Demonstrate problem solving skills to determine molarity, molality, percent composition, and colligative properties of matter.		0 1 2
	12. Predict the qualitative and quantitative outcomes of chemical reactions using the Law of Conservation of Matter and Energy.		0 1 2
3.0 Interactions of Matter	13. Describe the difference between ionic and covalent bonding using Lewis models, formulas, and nomenclature.		0 1 2
	14. Convert molar mass to number of moles, molar volume, and the number of particles of the substances using appropriate significant figures.		0 1 2

## Chemistry Rubric

Signature

Chemistry Essential Knowledge and Skills	Method of Assessment *See Key	0 = No Evidence 1 = limited Evidence 2 = Proficient or Above Rating from 0 to 2
15. Compare applications of thermal changes in chemical and nuclear reactions.		0 1 2
16. Use experimental data to calculate the percent composition and empirical formulas of compounds.		0 1 2
17. Apply mathematical principles to solve stoichiometry problems.		0 1 2
18. Describe chemical reactions by writing and balancing equations.		0 1 2
19. Calculate the amount of heat lost or gained by a substance based on its mass, change of temperature, and specific heat during physical and chemical reactions.		0 1 2
20. Use appropriate tools to investigate the acidity/basicity of various substances.		0 1 2
essment Key ue classroom tests and/or assignments	TOTAL P	
e onse ology		10 7 <sub>0</sub>
	<ol> <li>Compare applications of thermal changes in chemical and nuclear reactions.</li> <li>Use experimental data to calculate the percent composition and empirical formulas of compounds.</li> <li>Apply mathematical principles to solve stoichiometry problems.</li> <li>Describe chemical reactions by writing and balancing equations.</li> <li>Calculate the amount of heat lost or gained by a substance based on its mass, change of temperature, and specific heat during physical and chemical reactions.</li> <li>Use appropriate tools to investigate the acidity/basicity of various substances.</li> </ol>	Chemistry Essential Knowledge and Skills  *See Key  15. Compare applications of thermal changes in chemical and nuclear reactions.  16. Use experimental data to calculate the percent composition and empirical formulas of compounds.  17. Apply mathematical principles to solve stoichiometry problems.  18. Describe chemical reactions by writing and balancing equations.  19. Calculate the amount of heat lost or gained by a substance based on its mass, change of temperature, and specific heat during physical and chemical reactions.  20. Use appropriate tools to investigate the acidity/basicity of various substances.  22. Use appropriate tools to investigate the acidity/basicity of various substances.  23. TOTAL Percentage = Total Percentage = Total

Date